

Applicants: Nathan Ellis, James German, and Joanna Groden  
Serial No.: 09/753,143  
Filed: January 2, 2001  
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**REMARKS**

Claims 11-20 were pending in the subject application. By this Amendment, applicants have canceled claims 13 and 18 without prejudice or disclaimer, amended claim 11, and added new claims 86-93. Accordingly, upon entry of this Amendment, claims 11-12, 14-17, 19-20 and 86-93 will be pending and under examination.

Applicants maintain that the amendment to claim 11 and the addition of new claims 86-93 do not raise an issue of new matter. Support for the amendments can be found *inter alia* in the specification on at least page 8, lines 1-6; Table 1; and Figure 2A-2D.

Applicants have amended the Specification to provide a replacement Abstract, to enter Sequence Listing identifiers (SEQ ID NOs) in the text and in Table 2, to update reference citations, and to correct the continuity data for the subject application. Applicants maintain that the amendments to the Specification do not raise an issue of new matter.

Entry of the Amendment is respectfully requested.

**Objections to Specification - Sequence Listing Identifiers**

The specification has been amended to insert SEQ ID NOs in compliance with the Examiner's remarks on page 3 of the April 22, 2003 Office Action. Table 2 has been replaced with a new version of Table 2 that includes SEQ ID NOs. Each of the sequences in the Sequence Listing is mentioned in the amended specification.

In view of the amendments and remarks made hereinabove, applicants respectfully request that the Examiner withdraw the objections set forth with respect to the Sequence Listing.

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Objections to Abstract

The original Abstract of the Disclosure has been replaced by the Abstract of the Disclosure attached hereto as **Exhibit 2**. The replacement Abstract of the Disclosure provides a definition for the abbreviation "BS" and makes reference to "human" as suggested by the Examiner on page 4 of the Office Action.

In view of the amendments and remarks made hereinabove, applicants respectfully request that the Examiner withdraw the objections set forth with respect to the Abstract.

Objections to the Specification - Continuity Data

On page 4 of the Office Action, the Examiner indicated that the subject application is a divisional, rather than a continuation, of its parent application. The Examiner required appropriate amendment to the specification.

Applicants have hereinabove amended the specification to indicate that the subject application is a divisional of parent U.S. Application No. 09/175,828, filed October 20, 1998, now U.S. Patent No. 6,221,643. Accordingly, applicants respectfully request that this objection be withdrawn.

Objections to the Specification - Citation of References

On page 4 of the Office Action, the Examiner noted that certain reference citations were incomplete and required appropriate correction.

Applicants have hereinabove amended the specification to update and complete the citation of the references noted by the Examiner. Accordingly, applicants respectfully request that this objection be withdrawn.

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Objection to Claim 13

The Examiner objected to dependent claim 13 under 37 C.F.R. §1.75(c) for failing to limit the subject matter of a previous claim.

Applicants have hereinabove canceled claim 13, thereby rendering this objection moot.

Rejection under 35 U.S.C. §112, Second Paragraph

On page 5 of the Office Action, the Examiner rejected claims 11-20 under 35 U.S.C. §112, second paragraph, because the term “BLM gene” is unclear.

Applicants have hereinabove amended claim 11 to further recite “wherein the mutated *BLM* gene is a mutated form of nucleic acid encoding the amino acid sequence set forth in SEQ ID NO:78.” Applicants maintain that the amended claims particularly point out and distinctly claim the subject matter that applicants regard as the invention. Accordingly, reconsideration and withdrawal of this ground of rejection is respectfully requested.

Rejections under 35 U.S.C. §112, First Paragraph

On pages 5 and 7 of the Office Action, the Examiner rejected claims 11-20 under 35 U.S.C. §112, first paragraph, for not meeting the written description requirement for the full breath of the claims. The Examiner indicated that the instant rejection is based on a broad interpretation of the term “BLM gene” to encompass any gene linked to Bloom’s syndrome, whereas a single example of a Bloom’s syndrome-lined gene is described in the specification.

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On page 8 of the Office Action, the Examiner rejected claims 11-20 under 35 U.S.C. §112, first paragraph, as not enabled for the full extent of their scope.

Applicants have hereinabove amended claim 11 to further recite “wherein the mutated *BLM* gene is a mutated form of nucleic acid encoding the amino acid sequence set forth in SEQ ID NO:78.” Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

On page 10 of the Office Action, the Examiner rejected claim 18 under the enablement requirement of 35 U.S.C. §112, first paragraph.

Applicants have hereinabove canceled claim 18, thereby rendering this rejection moot.

#### Information Disclosure Statement

In accordance with the duty of disclosure under 37 C.F.R. §1.56, applicants would like to direct the Examiner’s attention to the eight references that are listed on Form PTO/SB/08A-B (2 pages) attached hereto as **Exhibit 3**. A copy of references U.S. Patent No. 6,221,643 B1 and U.S. Patent No. 5,824,501 are attached hereto as **Exhibit 4**. The remaining references listed on the attached form were previously submitted to or cited by the Patent Office during the prosecution of U.S. Patent Application No. 08/559,303 and/or U.S. Patent Application No. 09/175,828, from which the subject application claims the benefit of its filing date under 35 U.S.C. §120. Accordingly, pursuant to 37 C.F.R. §1.98(d), copies of previously cited or submitted references are not included with this Information Disclosure Statement.

Applicants are submitting the subject Information Disclosure Statement pursuant to 37 C.F.R. §1.97(c)(2) before the mailing of any of a Final Office Action under 37 C.F.R.

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§1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application. A check for \$180.00 is enclosed to cover the fee for submitting an Information Disclosure Statement pursuant to 37 C.F.R. §1.97(c)(2).

### **CONCLUSIONS**

In view of the amendments and remarks made hereinabove, applicants respectfully request reconsideration and withdrawal of the objections and rejections set forth in the April 22, 2003 Office Action and earnestly solicit passage of the pending claims to allowance.

No fee, other than the enclosed \$180.00 fee for filing an Information Disclosure Statement, is deemed necessary in connection with the filing of this Amendment and Information Disclosure Statement. However, if any other fee is required to preserve the pendency of the subject application, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 01-1785.

Respectfully submitted,

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By: 

Dated: July 17, 2003  
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